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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,650	04/14/2004	Ryan Joy	1017-0035-US	7683
34456	7590	05/19/2005	EXAMINER	
TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			PREVIL, DANIEL	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/824,650	Applicant(s) JOY ET AL.	
	Examiner Daniel Previl	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.  
4a) Of the above claim(s) 5-9 and 21-29 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 10-20 and 30-42 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/29/2004, 8/20/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-4, 10-20 and 30-42 are examined and claims 5-9, 21-29 are withdrawn from consideration due to election restriction.

### **ELECTION/RESTRICTIONS**

- I. Claims 1-4, 10-20, 30-42, drawn to sensor pod, classified in class 340, subclass 539.26.
- II. Claims 5-9, drawn to computer-implemented method of determining airflow, classified in class 340, subclass 589.
- III. Claims 21-29, drawn to method of providing data request from a host device via a serial data interface, classified in class 340, subclass 825.62.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions I, II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because Group I is directed to a sensor pod. The subcombination has separate utility such as a computer-implemented method of determining airflow.
2. During a telephone conversation with John Schell on May 13, 2005 a provisional election was made without traverse to prosecute the invention of group I, claims 1-4, 10-

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20, 30-42 . Affirmation of this election must be made by applicant in replying to this Office action. Claims 5-9, 21-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ehlers et al. (US 6,216,956).

Regarding claim 10, Ehlers discloses a sensor device (fig. 2) comprising: processing circuitry (fig. 1-fig. 4); at least one sensor (temperature sensor 8) coupled to the processing circuit (fig. 2-fig. 4); a serial data interface (keypad 7) coupled to the processing circuitry (fig. 2-fig. 4); and memory responsive to the processing circuitry (col. 8, lines 16-22), the memory including a static unique identification number (password, key sequence) (col. 27, lines 49-67) wherein the

serial data interface provides access to retrieve the static unique identification number (password) and sensed data measured with the at least one sensor from the memory (col. 27, lines 49-59; col. 28, lines 33-64).

Regarding claim 11, Ehlers discloses one sensor is selected from the group consisting of a temperature sensor, a humidity sensor, an airflow sensor and an audio sensor (fig. 2-fig. 4).

Regarding claim 12, Ehlers discloses static unique identification number is used to maintain data integrity in the vent of a change in an address associated with the serial data interface (col. 27, lines 49-59; col. 28, lines 38-50).

Regarding claim 13, Ehlers discloses static unique identification number is used to maintain data integrity in the event of a change in a host associated with the serial data interface (col. 27, lines 49-59; col. 28, lines 38-50).

Regarding claim 14, Ehlers discloses static unique identification number is used to maintain data integrity in the event of cross host exchange of the sensed data (col. 27, lines 49-59; col. 28, lines 38-50).

Regarding claim 15, Ehlers discloses the serial data interface includes a USB interface (col. 27, lines 49-31, and col. 31, lines 54-58).

Regarding claim 16, Ehlers discloses the processing circuitry is configured to measure a dew point (col. 17, lines 16-27).

Regarding claim 17, Ehlers discloses an external sensor interface coupled to the processing circuitry (col. 7, lines 1-6).

Regarding claim 18, Ehlers discloses external sensor interface is coupled to a moisture sensor (col. 7, lines 1-11).

Regarding claim 19, Ehlers discloses an card-edge serial interface (col. 10, lines 14-17).

3. Claims 30, 32, 34-39, 41-42, are rejected under 35 U.S.C. 102(b) as being anticipated by Barrett et al. (US 5,216,623).

Regarding claims 30, 35, Barrett discloses a sensor device (fig. 1A) comprising: a temperature sensor, humidity sensor; airflow sensor (fig. 1A); processing circuitry (controller 14) responsive to the temperature sensor, the humidity sensor and the airflow sensor (fig. 1A) and a serial data interface (pins 1-9) coupled to the processing circuitry (col. 6, lines 9-12).

Regarding claim 32, Barrett discloses a second temperature sensor located external to a sensor device housing and wherein the temperature sensor and the humidity sensor are located inside the sensor device housing (col. 3, lines 15-32).

Regarding claim 34, Barrett discloses a universal serial bus interface (pin 1-9) (col. 6, lines 9-12).

Regarding claim 36, Barrett discloses the processing circuitry is configured to determine a dew point (temperature sensor, humidity sensor) (fig. 1A; col. 3, line 18 and line 29).

Regarding claim 37, Barrett discloses the temperature sensor is a digital temperature sensor (fig. 1A).

Regarding claim 38, Barrett discloses the temperature sensor is analog and further comprising an analog to digital converter (A/D) (fig. 1A, ref. 18).

Regarding claim 39, Barrett discloses an external sensor interface coupled to the processing circuitry (col. 3, lines 17-30).

Regarding claim 41, Barrett discloses the external sensor interface is coupled to a moisture sensor (col. 3, lines 17-32).

Regarding claim 42, Barrett discloses a display coupled to the processing circuitry (col. 4, lines 51-55).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 31, 33, 40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. (US 5,216,623) in view of Ehlers et al. (US 6,216,956).

Regarding claim 1, Barrett discloses a sensor pod (abstract) comprising: a housing (controller housing 49) (fig. 1, ref. 49); a temperature sensor (col. 3, line 43); a humidity sensor (col. 3, line 29); airflow sensor (col. 3, line 28; col. 3, line 47); an external sensor interface (pin of the sensor output 44) (col. 5, line 26); a processing circuitry located within the housing (processing circuitry 20 within the housing 49) (fig. 1A); the temperature sensor, the humidity sensor, the airflow

sensor and the external sensor interface being responsive to the processing circuitry (fig. 1A).

Barrett discloses all the limitations above but fails to explicitly disclose a memory responsive to the processing circuitry and including a static identification number; and a universal serial bus (USB) interface coupled to the processing circuitry, the USB interface configured to provide access to measured data associated with the temperature sensor, the humidity sensor, the airflow sensor, and the external sensor interface, the measured data associated with the static identification number.

However, Ehlers a memory responsive to the processing circuitry and including a static identification number (col. 27, lines 49-59) ; and a universal serial bus (USB) interface (keypad 7) coupled to the processing circuitry (fig. 2-fig. 3), the USB interface (keypad 7) (fig. 2-fig. 3) configured to provide access to measured data associated with the temperature sensor, the humidity sensor, the airflow sensor, and the external sensor interface, the measured data associated with the static identification number (col. 30, lines 36-64; col. 29, lines 1-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ehlers in Barrett. Doing so would have provided the system with the capability of maintaining efficiently environmental conditions and energy consumption thereby minimizing energy consumption and energy cost for the economical purposes as taught by Ehlers (col. 1, lines 9-14).



Regarding claim 2, Barrett discloses a second temperature sensor located external to the housing, wherein the temperature sensor and the humidity sensor are located in the internal to the housing (indoor and outdoor temperature sensors may also be utilized) (col. 3, lines 17-32).

Regarding claims 3, 33, Barrett and Ehlers disclose all the limitations in claim 1 and Ehlers further discloses audio 58 (fig. 2, ref. 58). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ehlers in Barrett. Doing so would have provided the system with the capability of outputting efficiently environmental conditions and energy consumption thereby providing higher fidelity signals to the consumers for the economical purposes as taught by Ehlers (col. 1, lines 9-14).

Regarding claim 4, Barrett discloses the processing circuitry is configured to determine a dew point (temperature sensor, humidity sensor) (fig. 1A; col. 3, line 18 and line 29).

Regarding claim 31, Barrett and Ehlers disclose all the limitations in claim 30 and Ehlers further discloses a memory including a static identification number, the processing circuitry configured to associate the static identification number with sensor data retrieved from at least one of the temperature sensor, the humidity sensor and the airflow sensor (col. 27, lines 49-67; col. 28, lines 39-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ehlers in Barrett. Doing so would have provided the system with the capability of maintaining

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efficiently environmental conditions and energy consumption thereby minimizing energy consumption and energy cost for the economical purposes as taught by Ehlers (col. 1, lines 9-14).

Regarding claim 40, the examiner takes the official notice that "the external sensor interface coupled to a door sensor" is well known in the art.

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlers et al. (US 6,216,956) in view of Barrett et al. (US 5,216,623).

Regarding claim 20, Ehlers discloses all the limitations in claim 10 but fails to explicitly disclose an internal humidity sensor responsive to the processing circuitry and internal to a housing; an internal temperature sensor responsive to the processing circuitry and internal to a housing; and an external temperature sensor responsive to the processing circuitry and external to a housing.

However, Barrett discloses an internal humidity sensor responsive to the processing circuitry and internal to a housing; an internal temperature sensor responsive to the processing circuitry and internal to a housing; and an external temperature sensor responsive to the processing circuitry and external to a housing (indoor and outdoor temperature sensors may also be utilized) (col. 3, lines 18-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Barrett in Ehlers in order to monitor accurately energy consumption thereby improving energy

consumption for the economical purposes as taught by Barrett (col. 1, lines 7-32).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ragle et al. (US 6,195,018) discloses a metering system.

Canada et al. (US 6,138,078) discloses a machine monitor with tethered sensors.

Tinsley et al. (US 6,681,787) discloses a system and method of operation of a digital mass flow controller.

Budike, Jr. (US 6,311,105) discloses a multi-utility energy control system.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Previl whose telephone number is (571) 272-2971. The examiner can normally be reached on Monday-Thursday. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Previl  
Examiner  
Art Unit 2636

DP  
May 12, 2005.

  
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SUPERVISORY PATENT EXAMINER  
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